

**Claims**

1. A printhead for a pagewidth ink jet printer, the printhead comprising:

an elongate receiving member that defines a receptacle; and

at least one elongate printhead module, the, or each printhead module defining a channel in which a printhead chip is receivable,

the receiving member and the, or each printhead module, together defining pairs of complementary location formations such that the, or each printhead module is received in the receptacle so that the complementary locating formations engage each other, with the, or each, module extending along a longitudinal axis of the receiving member,

wherein, for the, or each printhead module, the complementary location formations comprise a first pair of complementary location formations, the first pair comprising a projection and a recess adapted to receive the projection, wherein the recess is extended in the longitudinal direction with respect to the projection and wherein the projection is slidably received within the recess so that expansion of the, or each, printhead module relative to the receiving member along the longitudinal axis is accommodated.

2. The printhead of claim 1 in which the receiving member has opposed walls interconnected by a bridging portion to define the receptacle.

3. The printhead of claim 2 which includes a plurality of printhead modules arranged in end-to-end relationship in the receptacle, each channel being angled with respect to its associated module so that the printhead chips of adjacent modules overlap.

4. The printhead of claim 3 in which each module is stepped at its end to nest with a consecutive module.

5. The printhead of claim 3 in which each printhead module has a set of locating formations and in which the receiving member has a complementary set of locating formations at a location for each module in the receptacle.

6. The printhead of claim 1 in which the recess is a slot, and the projection is hemispherical.

5 7. The printhead of claim 1 in which, for the or each printhead module, the complementary location formations further comprises a second pair of complementary location formations comprising a projection and a correspondingly sized recess for receiving the projection to locate the, or each printhead module in a longitudinal direction within the receiving member.

10 8. The printhead of claim 7 in which the recesses of the first and second pair of complementary location formations are formed in a first wall of the, or each printhead module, and the projections of the first and second pair of complementary location formations are formed in a first wall of the receiving member.

15 9. The printhead of claim 8 wherein the recesses of the first and second pair of complementary location formations are substantially triangular, when viewed in cross section normal to the longitudinal axis

20 10. The printhead of claim 8 in which, for the, or each, printhead module, the complementary location formations further comprises a third pair of complementary location formations comprising a projection and a recess, the third formation of the receiving member being formed in a second wall of the receiving member opposite the first wall, the third formation of the, or each printhead module being formed in a second wall of the, or each printhead module.

25 11. The printhead of claim 10 in which the third pair of complementary formations comprises a snap release extending from the second wall of the receiving member and a third recess formed in the printhead module, wherein the snap release is received in the third recess such that an inner end of the snap release abuts against a wall of the third  
30 recess.

12. The printhead of claim 11 in which the width of the, or each printhead module is less than a spacing between the first and second opposed walls of the receiving member, and for the, or each printhead module, the snap release urges the printhead module

towards the first wall of the receiving member such that the projections of the first and second complementary location formations are received in the respective recesses of the first and second complementary location formations.

5      13.    The printhead of claim 12 in which the snap release is mounted on a resiliently flexible arm of the second wall of the receiving member.

14.    The printhead of claim 11 in which the length of the snap release in the longitudinal direction is shorter than the length of the recess.

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